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SEQUENCE LISTING

<110> THOMAS JEFFERSON UNIVERSITY
UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION

<120> METHODS AND COMPOSITIONS FOR INHIBITING CHOLESTEROL
UPTAKE

<130> 003252-053291-PCT

<140> PCT/US04/03020

<141> 2004-02-03

<150> 60/444,475

<151> 2003-02-03

<160> 13

<170> PatentIn Ver. 3.2

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<211> 339

<212> PRT

<213> Homo sapiens

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Met Ser Thr Val His Glu Ile Leu Cys Lys Leu Ser Leu Glu Gly Asp
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His Ser Thr Pro Pro Ser Ala Tyr Gly Ser Val Lys Ala Tyr Thr Asn
20 25 30

Phe Asp Ala Glu Arg Asp Ala Leu Asn Ile Glu Thr Ala Ile Lys Thr
35 40 45

Lys Gly Val Asp Glu Val Thr Ile Val Asn Ile Leu Thr Asn Arg Ser
50 55 60

Asn Ala Gln Arg Gln Asp Ile Ala Phe Ala Tyr Gln Arg Arg Thr Lys
65 70 75 80

Lys Glu Leu Ala Ser Ala Leu Lys Ser Ala Leu Ser Gly His Leu Glu
85 90 95

Thr Val Ile Leu Gly Leu Leu Lys Thr Pro Ala Gln Tyr Asp Ala Ser
100 105 110

Glu Leu Lys Ala Ser Met Lys Gly Leu Gly Thr Asp Glu Asp Ser Leu
115 120 125

Ile Glu Ile Ile Cys Ser Arg Thr Asn Gln Glu Leu Gln Glu Ile Asn
130 135 140

Arg Val Tyr Lys Glu Met Tyr Lys Thr Asp Leu Glu Lys Asp Ile Ile
145 150 155 160

Ser Asp Thr Ser Gly Asp Phe Arg Lys Leu Met Val Ala Leu Ala Lys
165 170 175

Gly Arg Arg Ala Glu Asp Gly Ser Val Ile Asp Tyr Glu Leu Ile Asp
180 185 190

Gln Asp Ala Arg Asp Leu Tyr Asp Ala Gly Val Lys Arg Lys Gly Thr
 195 200 205
 Asp Val Pro Lys Trp Ile Ser Ile Met Thr Glu Arg Ser Val Pro His
 210 215 220
 Leu Gln Lys Val Phe Asp Arg Tyr Lys Ser Tyr Ser Pro Tyr Asp Met
 225 230 235 240
 Leu Glu Ser Ile Arg Lys Glu Val Lys Gly Asp Leu Glu Asn Ala Phe
 245 250 255
 Leu Asn Leu Val Gln Cys Ile Gln Asn Lys Pro Leu Tyr Phe Ala Asp
 260 265 270
 Arg Leu Tyr Asp Ser Met Lys Gly Lys Gly Thr Arg Asp Lys Val Leu
 275 280 285
 Ile Arg Ile Met Val Ser Arg Ser Glu Val Asp Met Leu Lys Ile Arg
 290 295 300
 Ser Glu Phe Lys Arg Lys Val Gly Lys Ser Leu Tyr Tyr Tyr Ile Gln
 305 310 315 320
 Gln Asp Thr Lys Gly Asp Tyr Gln Lys Ala Leu Leu Tyr Leu Cys Gly
 325 330 335

Gly Asp Asp

<210> 2
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 <212> PRT
 <213> Danio rerio

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 Asn Pro Glu Val Asp Ala Ala Lys Ile Glu Thr Ala Ile Lys Thr Lys
 35 40 45
 Gly Val Asp Glu Gln Thr Ile Ile Asp Ile Leu Thr Arg Arg Ser Leu
 50 55 60
 Leu Lys Arg Ser Asp Ile Ala Phe Glu Tyr Glu Lys Arg Ala Lys Lys
 65 70 75 80
 Asp Leu Val Ser Ala Leu Lys Gly Ala Leu Ser Gly Ser Leu Glu His
 85 90 95
 Leu Ile Leu Gly Leu Met Lys Ser Thr Pro Gln Tyr Asp Ala Phe Glu
 100 105 110
 Leu Lys Ala Met Lys Gly Leu Gly Thr Asp Glu Glu Ser Leu Ile Glu
 115 120 125

Met Val Cys Ser Arg Asn Lys Glu Glu Leu Ala Glu Ile Lys Lys Val
 130 135 140
 Tyr Lys Glu Met Phe Lys Lys Asp Leu Glu Lys Asp Ile Ser Gly Asp
 145 150 155 160
 Thr Ser Gly Asp Phe Ala Lys Leu Leu Leu Ala Leu Ala Gln Gly Asn
 165 170 175
 Arg Glu Glu Gln Ser Ser Val Val Asp Tyr Glu Lys Ile Asp Asn Asp
 180 185 190
 Ala Arg Thr Leu Tyr Glu Thr Gly Val Arg Arg Lys Gly Thr Asp Val
 195 200 205
 Val Thr Trp Ile Ser Ile Phe Ser Glu Arg Ser Val Ser His Leu Gln
 210 215 220
 Lys Val Phe Glu Arg Tyr Lys Arg Tyr Ser Pro Tyr Asp Leu Lys Glu
 225 230 235 240
 Ser Ile Arg Met Glu Val Lys Gly Asp Leu Glu Lys Ser Phe Leu Thr
 245 250 255
 Leu Val Glu Cys Leu Glu Asn Lys His Leu Tyr Phe Ala Ser Arg Leu
 260 265 270
 Asn Asp Ala Met Lys Gly Lys Ser Val Lys Asp Lys Ile Ile Thr Arg
 275 280 285
 Ile Ile Val Ser Arg Cys Glu Val Asp Leu Met Lys Val Arg Ile Glu
 290 295 300
 Phe Lys Arg Asn Phe Gly Arg Ser Leu His Gln Thr Ile Ser Glu His
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 325 330 335

Asp

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 <213> Danio rerio

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 20 25 30
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 35 40 45
 Thr Lys Glu Ile Asp Leu Val Asn Arg Asp Pro Lys His Leu Asn Asp
 50 55 60
 Asp Val Val Lys Val Asp Phe Glu Asp Val Ile Ala Glu Pro Ala Gly

65		70		75		80									
Thr	Tyr	Ser	Phe	Asp	Gly	Val	Trp	Lys	Ala	Ser	Phe	Thr	Thr	Phe	Thr
				85					90					95	
Val	Thr	Lys	Tyr	Trp	Cys	Tyr	Arg	Leu	Leu	Thr	Ala	Leu	Val	Gly	Ile
			100					105					110		
Pro	Leu	Ala	Leu	Val	Trp	Gly	Ile	Phe	Phe	Ala	Ile	Leu	Ser	Phe	Ile
		115					120					125			
His	Ile	Trp	Ala	Val	Val	Pro	Cys	Val	Lys	Ser	Tyr	Leu	Ile	Glu	Ile
	130					135					140				
His	Cys	Ile	Ser	Arg	Val	Tyr	Ser	Ile	Cys	Val	His	Thr	Phe	Cys	Asp
145					150					155					160
Pro	Leu	Phe	Glu	Ala	Met	Gly	Lys	Cys	Phe	Ser	Asn	Val	Arg	Val	Thr
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Ala	Thr	Lys	Val	Val											
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20 25 30
Ala Asp Glu Leu Ser Glu Lys Gln Val Tyr Asp Ala His Thr Lys Glu
35 40 45
Ile Asp Leu Val Asn Arg Asp Pro Lys His Leu Asn Asp Asp Val Val
50 55 60
Lys Ile Asp Phe Glu Asp Val Ile Ala Glu Pro Glu Gly Thr His Ser
65 70 75 80
Phe Asp Gly Ile Trp Lys Ala Ser Phe Thr Thr Phe Thr Val Thr Lys
85 90 95
Tyr Trp Phe Tyr Arg Leu Leu Ser Ala Leu Phe Gly Ile Pro Met Ala
100 105 110
Leu Ile Trp Gly Ile Tyr Phe Ala Ile Leu Ser Phe Leu His Ile Trp
115 120 125
Ala Val Val Pro Cys Ile Lys Ser Phe Leu Ile Glu Ile Gln Cys Ile
130 135 140
Ser Arg Val Tyr Ser Ile Tyr Val His Thr Val Cys Asp Pro Leu Phe
145 150 155 160
Glu Ala Val Gly Lys Ile Phe Ser Asn Val Arg Ile Asn Leu Gln Lys

165

170

175

Glu Ile

<210> 5
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<222> (7)
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<220>
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<220>
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1 5 10 15

Xaa Pro Glu

<210> 6
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<210> 7
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<212> PRT
<213> Danio rerio

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<210> 8
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<210> 10
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
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<210> 11
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oligonucleotide

<400> 11
gccattttcc ttagttgttg tagag 25

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gccaatttcg ttagtagttg aagag 25

<210> 13
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<220>
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oligonucleotide

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ctaagaactc agagaccaaa gccat 25